

REMARKS

After entry of this Amendment, claims 1-16 are pending in this application. Claims 1-16 stand rejected. In view of the remarks below, Applicants respectfully request the rejections be withdrawn and that the claims be allowed.

Claims 1, 4-11 and 13-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated over U.S. Patent No. 4,329,055 to Schaefer et al. ("Schaefer"). The rejection is respectfully traversed.

Claim 1 recites an apparatus for varying the path length of a beam of radiation. The apparatus includes "an element rotatably mounted about an axis" and "driving means for rotatably oscillating said element back and forth about said axis." Claim 1, therefore, recites an apparatus that differs from the prior art for at least the reason that the prior art discloses the use of "a constantly rotating optic" and not a "rotatably oscillating" element that oscillates "back and forth." *See, e.g.*, Application, p. 2, para. 1. As explained below, Schaefer discloses a constantly rotating element but fails to teach or suggest at least a "driver means for rotatably oscillating said element back and forth about said axis."

Schaefer is directed to an interferometer system for measuring the wavelength of laser light. Schaefer, Abstract. Schaefer includes a "body 3 [that] is rotably supported about an axis going through the point O of FIG. 1." Schaefer, col. 3, ll. 27, 28. Figure 1 of Schaefer shows rotation of the body 3 in only one direction (as indicated by the clockwise-directed arrows). Schaefer never teaches or suggests anything other than simple rotation, let alone oscillation, of the body 3.

The Office Action suggests that Schaefer teaches back and forth oscillation of the body 3. Office Action, p. 2. However, Schaefer never suggests anything more than full rotation. For example, Schaefer explains that measurement only occurs during a fraction of the "full turning time." "Because the measuring in an angle range of about -9° to $+9^{\circ}$ may be taken about the 0° position of FIG. 1, the measuring time in fact is only 1/20 of the full turning time, that is to say 20

msec.” Schaefer, col. 5, ll. 15-18. The 18° measuring angle is 1/20 of a full 360° rotation. Thus, since Schaefer clearly indicates that measurement is only made over a very small fraction of angles of the turning cycle, one skilled in the art would clearly deduce that the element in Schaefer fully rotates and does not oscillate back and forth.

Additionally, Schaefer teaches “a smooth, unchanging speed of rotation.” Schaefer, col. 3, l. 35. Back and forth oscillation could not be said to have “unchanging speed.” Furthermore, the arrows on the rotating body 3 in Figure 1 clearly show that the rotating body is fully rotating, not oscillating back and forth.

The back and forth oscillation of claim 1 results in significant advantages over the full rotation of Schaefer and other prior art references, as discussed in the present application. See, e.g., Application, ¶¶ [0004], [0005], [0013].

Therefore, for at least the reasons explained above, Schaefer fails to disclose each limitation of claim 1. Specifically, Schaefer fails to disclose a “driving means for rotatably oscillating said element back and forth about said axis.” Claim 1 is thus allowable over Schaefer. Claims 4-11, 13 and 14 depend from claim 1 and are allowable for at least the same reasons that claim 1 is allowable. Claim 16 recites a system that includes the apparatus of claim 1, and is thus also allowable for at least the same reasons that claim 1 is allowable.

Claim 15 recites a method for varying the path length of a beam of radiation. The method includes providing an element, “rotatably mounting said element about an axis; and rotatably oscillating said element back and forth about said axis.” As explained above, Schaefer fails to disclose the back and forth oscillation of a transparent element. Schaefer only teaches the rotation of the transparent element. For at least this reason, claim 15 is allowable over Schaefer.

Because Schaefer fails to disclose each element of claims 1, 4-11 and 13-16, these claims are allowable over Schaefer. Accordingly, Applicants respectfully request that the rejections be withdrawn and the claims be allowed.

Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schaefer. The rejection is respectfully traversed.


Claims 2 and 3 depend from claim 1. As explained above, claim 1 is not rendered unpatentable by Schaefer for at least the reason that Schaefer fails to teach or suggest "driving means for rotatably oscillating said element back and forth about said axis." For at least this same reason, claims 2 and 3 are also not rendered unpatentable by Schaefer. Accordingly, Applicants respectfully request that the rejection be withdrawn and that the claims be allowed.

Applicants note that there is no mention in the Office Action regarding the status of claim 12. Applicants point out that claim 12 depends from claim 1 and is believed by Applicants to be allowable for at least the same reasons that claim 1 is allowable.

In view of the above, Applicants believe the pending application is in condition for allowance. If there are any additional charges in connection with this filing or any subsequent filings (including but not limited to issue fees), the Examiner is respectfully requested and authorized to charge Deposit Account No. 04-1073 therefor under Order No. M0025.0323/P323.

Dated: July 10, 2009

Respectfully submitted,

By 
Stephen A. Soffen
Registration No.: 31,063
Thomas D. Anderson, Esq.
Registration No.: 56,293
DICKSTEIN SHAPIRO LLP
1825 Eye Street, NW
Washington, DC 20006-5403
(202) 420-2200
Attorneys for Applicants